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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/084,949

03/01/2002

David Wu

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8253

7590

07/27/2004

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EXAMINER

MOSSER, ROBERT E

ART UNIT

PAPER NUMBER

3714

DATE MAILED: 07/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/084,949	<b>Applicant(s)</b> WU, DAVID	
	<b>Examiner</b> Robert Mosser	<b>Art Unit</b> 3714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2004.  
 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 8-13 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 8-13 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**



**Responsive to the amendment filed 3-22-2004.**

**Claims 8-13 are pending.**

**This action is final due to amendment**



***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 8, 9, 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rockhold et al (US 4,772,028) in view of Kounoe et al (US 5,577,962).

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Regarding claims 8, 9, and 11, Rockhold teaches an electronic shooting game including:

A plurality of operating buttons located on the exterior of the gun including a trigger (54) and a hammer (55) which is understood to function as a power switch in view of figure 3 element 87;

a single chip microprocessor (41);

a Battery power supply (85); and,

a plurality of operating buttons including a trigger located on the exterior of the light gun (Ozaki Elm 7-10).

Rockhold is silent however regarding the use of Light emitting diodes for a light source, the use of micro switches, and the location of the image line, sound line, transformer power supply lines extending from the device.

The use of Light Emitting Diodes for a light source is old and well known in the art it would have been obvious to one of ordinary skill in the art at the time of invention have incorporated LEDs in the device of Rockhold in order to indicate the number of virtual rounds remaining in their light gun.

The position and connection of the light gun to the audio and visual devices associated with the game is presented in figures 3 and 4 of Rockhold as being accomplished in a wireless manner. However use of wires for transmitting audio, and visual signals would have been obvious to one of ordinary skill in the art at the time of invention in order to avoid wireless interference. Further the quantification of the

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described audio and visual "sockets" is interpreted as describing no more than a connection point and so an inherent feature.

Kounoe teaches the use of micro-switches (25) for receiving the operation of the trigger unit and (16) for an additional operational input. It would have been obvious to one of ordinary skill in the art at the time of invention to have incorporated the feature of micro-switches for the mechanical detection means of the trigger in the device of Rockhold in order to utilize a small switching device.

The replacement of the battery power source with a transformed line source is a common technique to avoid inherent problems of battery use, including weight, possible leakage, and required replacement. It would have been obvious to one of ordinary skill in the art at the time of invention to have replaced the batteries of Rockhold/Kounoe as modified above with a transformer power source to lessen the weight of the light gun.

The arrangement of components onto an electronic circuit board is considered an implicit feature of electronic components and required for the mounting of microprocessors.

The photoelectric Diode is deemed equivalent to the light emitting laser source of Rockhold.

Regarding claims 12 and 13, Rockhold teaches the use of lens 65, barrel (light guide shade) 56 and two light pistols connected through a wireless connection. The obvious statement regarding the conversion of a wireless system to a wired system is set forth above and will not be repeated here. The locating of the laser source on a circuit board has also been addressed above and will not be repeated here.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rockhold et al (US4,772,028)) in view of Kounoe et al (US 5,577,962) in further view of Ozaki et al (US 6,672,962).

Rockhold/Kounoe is silent regarding the inclusion of an extension groove containing connection means. However Ozaki (US 6.672,962) teaches a connection groove with associated connection means in figure 5, elements 15 through 17. It would have been obvious to one of ordinary skill in the art at the time of invention to have incorporated the grove and connection means of Ozaki into the modified invention of Rockhold/Kounoe in order to save a users light gun preferences in a portable fashion.

### ***Response to Arguments***

Applicant's arguments with respect to claim 8-13 have been considered but are moot in view of the new ground(s) of rejection.

Arguments addressing the Rockhold reference and in particular the presence of switch externally located are demonstrated in elements 54 and 55 of figure 2. Deficiencies present in the Rockhold reference have been treated with Kounoe reference and Ozaki et al.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Mosser whose telephone number is (703)-305-4253. The examiner can normally be reached on 8:30-4:30 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris H Banks can be reached on 703-308-1745. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

REM

A handwritten signature in black ink, consisting of a large, stylized 'J' followed by a horizontal line extending to the right.

JESSICA HARRISON  
PRIMARY EXAMINER